

AMENDMENTS TO THE CLAIMS

Claims 1-52 (Cancelled)

Claim 53 (New) A data transmission method for sequentially transmitting data in packet units each containing transmission data from a transmitting end to a receiving end, said method comprising:

transmitting an uncompressed packet in which predetermined transmission data is stored as uncompressed data;

subsequently continuously transmitting compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data;

forming compressed data, via a first compression process, that is to be stored in any packet other than the uncompressed packet, based on transmission data of the uncompressed packet and transmission data of the packet to be compressed; and

forming compressed data that is to be stored in any packet other than the uncompressed packet, via a second compression process different from said first compression process,

wherein when transmitting the transmission data in packet units, switching between said first and said second compression processes.

Claim 54 (New) The data transmission method of Claim 53, wherein when transmitting the transmission data in packet units, said first and said second compression processes are switched according to a restoration error occurrence of the compressed packet at the receiving end, thereby performing either of said first or said second compression process.

Claim 55 (New) The data transmission method of Claim 53, further comprising:

receiving an error notification from the receiving end when an error occurs in a restoration process of restoring compressed data included in the compressed packet at the receiving end;

informing, when the frequency of error notification exceeds a predetermined value, the receiving end to perform a first restoration process for said first compression process, and thereafter performing said first compression process; and

informing, when the frequency of error notification becomes equal to or smaller than the predetermined value, the receiving end to perform a second restoration process for said second compression process, and thereafter performing said second compression process.

Claim 56 (New) The data transmission method of Claim 53, further comprising:

receiving a request from the receiving end, when the frequency of error which occurs in a restoration process of restoring compressed data included in the compressed packet exceeds a predetermined value, to perform said first compression process; and

receiving a request from the receiving end, when the frequency of error which occurs in the restoration process becomes equal to or smaller than the predetermined value, to perform said second compression process.

Claim 57 (New) A data reception method for receiving at a receiving end, data in packet units each containing transmission data from a transmitting end, said method comprising:

receiving an uncompressed packet in which predetermined transmission data is stored as uncompressed data;

subsequently continuously receiving compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data;

restoring, via a first restoration process, transmission data of a compressed packet to be restored, based on transmission data of the uncompressed packet and compressed data included in the compressed packet to be restored;

restoring compressed data stored in the compressed packet to be restored, via a second restoration process different from said first restoration process, and
switching between said first and said second restoration processes.

Claim 58 (New) The data reception method of Claim 57, wherein switching between said first and said second restoration processes is performed according to a restoration error occurrence of the compressed packet, thereby performing either of said first or said second restoration process.

Claim 59 (New) The data reception method of Claim 57, further comprising:
notifying the transmitting when an error occurs in restoring compressed data included in the compressed packet;
receiving notification from the transmitting end, when the frequency of error notification exceeds a predetermined value, to perform said first restoration process; and
receiving notification from the transmitting end, when the frequency of error notification becomes equal to or smaller than the predetermined value, to perform said second restoration process.

Claim 60 (New) The data transmission method of Claim 57, further comprising:
sending a request to the transmitting end, when the frequency of error which occurs in restoring compressed data included in the compressed packet exceeds a predetermined value, to perform a first compression process for said first restoration process; and
sending a request to the transmitting end, when the frequency of error which occurs in restoring compressed data included in the compressed packet becomes equal to or smaller than the predetermined value, to perform a second compression process for said second restoration process.

Claim 61 (New) A data transmission apparatus for sequentially transmitting data in packet units each containing transmission data from a transmitting end to a receiving end, said apparatus comprising:

Claim 61 (New) A data transmission apparatus for sequentially transmitting data in packet units each containing transmission data from a transmitting end to a receiving end, said apparatus comprising:

 a transmission unit operable to transmit an uncompressed packet in which predetermined transmission data is stored as uncompressed data, and then to continuously transmit compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data; and

 a formation unit operable to form a first type of compressed data that is to be stored in any packet other than uncompressed packet, based on transmission data of the uncompressed packet and transmission data of the packet to be compressed, and to form a second type of compressed data that is to be stored in any packet other than uncompressed packet and that is different than the first type of compressed data,

 wherein when transmitting the transmission data in packet units, said packet formation unit is operable to switch between forming the first type of data and forming the second type of data.

Claim 62 (New) The data transmission apparatus of Claim 61, further comprising a decision unit operable to instruct said formation unit to switch between forming the first type of data and forming the second type of data according to a restoration error occurrence of the compressed packet at the receiving end, thereby forming either of said first or said second type of data.

Claim 63 (New) The data transmission apparatus of Claim 61, further comprising:

 an error notification reception unit operable to receive an error notification when an error occurs in a restoration process of restoring compressed data included in the compressed packet at the receiving end,

 wherein when the frequency of error notification exceeds a predetermined value, said transmission unit informs the receiving end to perform a first restoration process for the first type of data and thereafter said formation unit forms the first type of data, and

wherein when the frequency of error notification becomes equal to or smaller than the predetermined value, said transmission unit informs the receiving end to perform a second restoration process for the second type of data and, thereafter said formation unit forms the second type of data.

Claim 64 (New) The data transmission apparatus of Claim 61, further comprising:

an error notification reception unit operable to receive a request from the reception end, when the frequency of error which occurs in a restoration process of restoring compressed data included in the compressed packet exceeds a predetermined value, for said formation unit to form the first type of data,

wherein said error notification reception unit is further operable to, when the frequency of error which occurs in the restoration process becomes equal to or smaller than the predetermined value, receive a request from the reception end for said formation unit to form the second type of data.

Claim 65 (New) A data reception apparatus for receiving data that is transmitted in packet units from a transmitting end, said apparatus comprising:

a reception unit operable to receive an uncompressed packet in which predetermined transmission data is stored as uncompressed data, and then to continuously receive compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data; and

a restoration unit operable to perform a first restoration process of restoring transmission data of a compressed packet to be restored, based on transmission data of the uncompressed packet and compressed data included in the compressed packet to be restored, and to perform a second restoration process, different from said first restoration process, of restoring compressed data stored in the compressed packet to be restored,

wherein said restoration unit is operable to switch between performing the first and the second restoration processes.

an error notification transmission unit operable to notify the transmitting end when an error occurs during restoring compressed data included in the compressed packet,

wherein when the frequency of error notification exceeds a predetermined value, said restoration unit is operable to receive an instruction to perform the first restoration process, and

wherein when the frequency of error notification becomes equal to or smaller than the predetermined value, said restoration unit is operable to receive an instruction to perform the second restoration process.

Claim 68 (New) The data reception apparatus of Claim 65, further comprising:

an error notification transmission unit operable to request, when the frequency of error which occurs during restoring compressed data included in the compressed packet exceeds a predetermined value, the transmitting end to perform a first compression process for the first restoration process,

wherein said error notification transmission unit is further operable to request, when the frequency of error which occurs during restoring compressed data becomes equal to or smaller than the predetermined value, the transmitting end to perform a second compression process for the second restoration process.